

REMARKS

Claims 1, 16, 30, 48 and 51 have been amended. Claim 1-39 and 41-51 are pending and claims 9-15, 24-29, 34-39, 41-47 and 50 are withdrawn from consideration. No new matter is presented in this Amendment. Proper support for the amendment to claims 1, 16, 30, 48 and 51 can be found in the specification, at least at paragraphs [0027] and [0031].

REJECTIONS UNDER 35 U.S.C. §103:

Claims 1-7, 16-22, 48 and 49 are rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka et al. (U.S. Patent 6,738,561) in view of Pinder et al. (U.S. Patent 6,219,358).

Applicants respectfully traverse this rejection for at least the following reason.

Regarding the rejection of independent claim 1, it is noted that claim 1 recites a recording medium including data reproduced by a recording and/or reproducing apparatus, the data comprising: predetermined **recording units recorded on the recording medium**, each recording unit having audio data, **and data packs designated to store additional data** related to the audio data, each of the data packs being recorded in predetermined locations in corresponding ones of the recording units of the audio data, wherein the **additional data is recorded in the data packs at a separate time than the audio data** recorded in the recording units.

Tanaka discloses a digital signal recording medium having a first area storing an audio title set, the audio title set having data representing audio information and data representing a still picture, the audio title set being void of a pack of data for playback control, the first area also storing information for managing the audio title set, the digital signal recording medium being void of a second area storing a video title set and information for managing the video title set (column 1, lines 38-46). Tanaka further discloses in FIG. 13, a sequence of packs containing control packs CONT, audio packs A, audio control packs A-CONT, and video packs V. Audio streams are recorded in the audio packs A. Each VCB unit VCBU has a set of successive packs which corresponds to a time length. The total number of packs in one VCB unit VCBU is arbitrary. The first pack in each VCB unit VCBU is a control pack CONT. On the other hand, each ACB unit ACBU has a set of successive packs which corresponds to another time length.

The total number of packs in one ACB unit ACBU is arbitrary. The first pack in each ACB unit is an audio control pack A-CONT. An audio control pack A-CONT in each ACB unit ACBU in a DVD-Audio is located at a place corresponding to a third pack in a VCB unit VCBU in a DVD-video (column 17, lines 22-37). In other words, Tanaka discloses a sequence of different types of packs including audio, video and control packs. Since these data packs contain information which is necessary for reproducing the data recorded in the data packs, all the data in the data packs is **simultaneously** on the recording medium. Accordingly, Tanaka discloses a recording medium along the lines of the conventional art, where additional data related to the data already recorded on the recording medium is multiplexed with the recorded data, making it impossible to edit the additional data.

Contrary to Tanaka, independent claim 1 recites a recording medium including predetermined **recording units recorded on the recording medium**, each recording unit having audio data, and **data packs designated to store additional data** related to the audio data, each of the data packs being recorded in predetermined locations in corresponding ones of the recording units of the audio data, wherein the **additional data is recorded** in the data packs **at a separate time than the audio data** recorded in the recording units. In other words, the additional data can be recorded at a different time than the audio data making it easier to modify or edit the data.

Pinder discloses a method for determining an available capacity for insertion of data into an outgoing bit stream and a desired insertion rate of said data into said outgoing bit stream. The method for inserting data into a bit stream uses a technique called "packet stuffing." This technique is used to fill unused or excess capacity by inserting all ones (1), all zeros (0), or pseudo-random 1's and 0's. The objective of this packet stuffing is to maintain a fixed bit rate. Accordingly, Pinder discloses a process for filling an unused or excess capacity space with some type of data with the objective of maintaining a fixed bit rate. Pinder fails to teach or suggest **data packs designated to store additional data** related to the audio data, wherein the **additional data is recorded** in the data packs **at a separate time than the audio data** recorded in the recording units.

Accordingly, Applicants respectfully assert that the rejection of claim 1 under 35 U.S.C. §103(a) should be withdrawn because neither Tanaka nor Pinder, whether taken singly or combined teach or suggest each feature of independent claim 1.

Furthermore, Applicants respectfully assert that dependent claims 2-7 are allowable at least because of their dependence from claim 1, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 2-7 also distinguish over the prior art.

Regarding the rejection of independent claim 16, it is noted that claim 16 recites a method of reproducing data, the method comprising, amongst other novel features, reading data from the recording medium, and reproducing the audio data and the additional data, after relating the additional data to the audio data, wherein the **additional data is recorded in data packs at a separate time than the audio data recorded in the recording units.**

Regarding the rejection of independent claim 48, it is noted that claim 48 recites a method of reproducing audio data comprising, amongst other novel features, demultiplexing the predetermined units to separate the audio data from data packs having the additional data based upon the data packs being in a predetermined location in the corresponding recording unit relative to a beginning of the recording unit, wherein the **additional data in the data packs is recorded at a separate time than the audio data.**

As noted above, Tanaka discloses a sequence of different types of packs including audio, video and control packs, where all the data in the data packs is recorded **simultaneously** or at the same time. Therefore, as noted above, Tanaka discloses a recording medium along the lines of the conventional art, where additional data related to the data already recorded on the recording medium is multiplexed with the recorded data, making it substantially impossible to edit the additional data.

Pinder discloses a process for determining the available capacity for insertion of an outgoing bit stream and varying the rate of data insertion into the outgoing bit stream based on the available capacity. Pinder fails to teach or suggest **additional data recorded in data packs at a separate time than the audio data recorded in the recording units**, as recited in independent claims 16 and 48.

Accordingly, Applicants respectfully assert that the rejection of claims 16 and 48 under 35 U.S.C. §103(a) should be withdrawn because neither Tanaka nor Pinder, whether taken singly or combined teach or suggest each feature of independent claims 16 and 48.

Furthermore, Applicants respectfully assert that dependent claims 17-22 are allowable at least because of their dependence from claim 16, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 17-22 also distinguish over the prior art.

Applicants also respectfully assert that dependent claim 49 is allowable at least because of its dependence from claim 48, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claim 48 also distinguishes over the prior art.

Claims 8, 23, 30-33 and 51 are rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka in view of Pinder and further in view of Ema (U.S. Patent No. 6,343,055).

Regarding the rejection of independent claim 30, it is noted that claim 30 recites a reproducing apparatus comprising, amongst other novel features, a demultiplexor demultiplexing audio packs in which audio data is recorded and RTI packs in which additional data is recorded, the additional data being recorded at a separate time than the audio data, from the read AOBU.

Regarding the rejection of independent claim 51, it is noted that claim 51 recites a reproducing apparatus comprising, amongst other novel features, an (RTI) processor decoding additional data related to the audio data in the corresponding recording unit and which is in the RTI packs demultiplexed by the demultiplexor, wherein the additional data of the RTI packs is recorded at a separate time than the audio data.

As noted above, Tanaka discloses a sequence of different types of packs including audio, video and control packs, where all the data in the data packs is recorded **simultaneously** or at the same time. Pinder discloses a process for determining the available capacity for insertion of an outgoing bit stream and varying the rate of data insertion into the outgoing bit stream based on the available capacity by filling unused packets with one's and zeros. Therefore, neither Tanaka nor Pinder teach or suggest a demultiplexor demultiplexing audio packs in which audio data is recorded and RTI packs in which additional data is recorded, the additional data being recorded at a separate time than the audio data, from the read AOBU.

Ema teaches a music reproducing apparatus and therefore is not related to the apparatus recited in independent claims 30 and 51.

Accordingly, Applicants respectfully assert that the rejection of claims 30 and 51 under 35 U.S.C. §103(a) should be withdrawn because neither Tanaka nor Pinder nor Ema, whether taken singly or combined teach or suggest each feature of independent claims 30 and 51, as amended.

Furthermore, Applicants respectfully assert that dependent claims 31-33 are allowable at least because of their dependence from claim 30, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 31-33 also distinguish over the prior art.

Regarding the rejection of claims 8 and 23 it is noted that these claims depend from independent claims 1 and 16, respectively. As noted above, neither Tanaka nor Pinder, whether taken singly or combined teach or suggest each feature of independent claims 1 and 16. Ema also fails to cure these deficiencies.

Accordingly, Applicants respectfully assert that dependent claims 8 and 23 are allowable at least because of their dependence from claims 1 and 16, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 8 and 23 also distinguish over the prior art.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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